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[54] **METHOD AND APPARATUS FOR
RECOGNIZING CURSIVE WRITING FROM
SEQUENTIAL INPUT INFORMATION**

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382/40

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382/14, 30

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[57] **ABSTRACT**

A method and apparatus for cursive script recognition employs an intermediate cursive words description language constructed of elements in the form of metastrokes wherein each of the metastrokes is a member of a metric space, the metric space being expressible as a matrix of likelihood of matching between input metastrokes and predefined metastrokes forming a vocabulary. Typically, a minimum of twenty metastrokes is used to form the vocabulary or set of allowable stroke elemental shapes, although as many as seventy may be used, with a correlation factor or measurement of similarity being defined between strings of metastrokes. Techniques for interpreting the metastrokes as words include substituting, adding, and deleting metastrokes in an input sequence, measuring similarity and comparing with entries in a dictionary of words constructed of metastroke sequences and variants of metastroke sequences. Weighting of similarity may include penalties for lack of similarity.

20 Claims, 11 Drawing Sheets